EXHIBIT F

Richard D. Gitlin

450 Knights Run Avenue (#1003)   Office: 813.974.1321
Tampa, FL 33602-5806   **Mobile: 908.385.2802**
                                                                richgitlin@gmail.com

Education

- Eng. Sc. D., Electrical Engineering, Columbia University, 1969.
- M.S., Electrical Engineering, Columbia University, 1965.
- B.E.E., The City College of New York, 1964 [with honors].
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Employment [detailed accomplishments available on request]

- **March 2010-present: Founder, co-CEO, and CTO, Innovatia Medical Systems LLC ---**an early stage medical device start up using advanced communications and networking technologies and based in Tampa, FL.

- **2008-present: State of Florida 21st Century Scholar, Distinguished University Professor, and Agere Systems Chair of Electrical Engineering at the University of South Florida.**

- **2005-2008: Chief Technology Officer, Hammerhead Systems.** A Silicon Valley startup providing innovative data networking solutions for wireline, wireless, and cable service providers. Responsible for developing a product line vision, developing core technology, representing product technology and directions with customers, partners, and standards bodies, and management of intellectual property. Personal research contributions in applications-aware networking.

- **2001-2004: Vice President Technology, NEC Laboratories America**
  Responsible for research in Broadband, IP, and Mobile Networking, System LSI, Secure Systems, and Quantum IT. Initiated many systems projects in wireless networks, 4G communications, system LSI, and secure, reliable systems.

  1969-2001: Bell Labs, Lucent Technologies

- **1998-2001: Senior Vice President R&D and CTO, Lucent Technologies: Data Networking Systems Group**
  Responsible for applied research, system architecture, standards, and network performance for IP/ATM data networking business unit. Initiatives included Bell Labs high-speed router (Packetstar), Cable Modem Termination System (CMTS), and BLAST (MIMO) commercialization.

- **1995-1998: Senior Research Vice President, Communications Sciences Research [Bell Labs]**

Responsible for leading and managing a broad range of research programs in broadband (IP/ATM) networking, wireless communications, multimedia systems, and system LSI. Managed ~500 people in 5 research labs, in multiple locations and continents [initiated labs in The Netherlands and the UK --- the first Bell Labs research locations outside the US]. Maintained personal research agenda in wireless and networking and significantly influenced the IS-95B (CDMA) multicode standard. I made significant personal contributions to the R&D of WiFi and CDMA systems.

- **1992-1995: Vice President, Communications Systems Research [Bell Labs]**
Led and managed ~100 research staff lab in communications, broadband networking, and access networking. Accomplishments include pioneering BLAST [MIMO space time coding], Packetstar IP Router/Switch, Atlanta 2.5 Gbps ATM chip set, and the DoCSIS cable protocol.

- **1987-1992: Director, Network Systems Research [Bell Labs]**
Initiated smart antenna research program, co-inventor of multicode CDMA (used in IS-95B and other standards), 20 Gbps Globeview ATM switch, LuckyNet Gigabit testbed, Diversity Coding, and Optical Equalization. Made strong personal contribution to smart antennas (today referred to as MIMO).

- **1986-1987: Director, Data Communications Research**
Co-inventor of DSL, initiated 56K modem development, helped create Globespan (DSL spinoff that went public).

- **1969-1986: Director, Supervisor and Member of Staff in Advanced Data Communications**
Co-inventor of the passband equalizer and made many other significant contributions to QAM systems, including scrambling, timing and carrier recovery, coded modulation, and echo cancellation. Championed the standardization and development of V.32/V.34 modems.

Expert Witness Experience (current cases in bold)

- **Ericsson v. Samsung, ITC Investigation No. 337-TA-862. The case is in the 3G and 4G wireless domains. McKool Smith, on behalf of Ericsson, has retained me, and the contact attorneys are Ted Stevenson and Kevin Burgess. I testified at the ITC hearing in September 2013.**
- **CSIRO v. Cisco Systems, Inc. Eastern District of Texas. Case 6:11-CV-343. The case is in the 3G/4G wireless domain. Capshaw & DeRieux LLP has retained me on behalf of CSIRO, and the contact attorney is Frederick Michaud. The case is in the 802.11 Wireless LAN domain. I have given a deposition in this case. Trial is scheduled for February 2014.**
- **Brandywine Communications Technologies, LLC v. AT&T Corp. Case No. 6:12-cv-283-Orl-36DAB, Northern District of California. Kilpatrick Townsend & Stockton LLP retained me on behalf of AT&T, and the contact attorney is Dan Young. The case is in the wireline modem (V.34 and DSL) domain. Trial is scheduled for August 2014.**
- **T-Mobile USA, Inc. ("T-Mobile") vs High Point SARL, U.S. District Court for the District of New Jersey. The case is in the 3G wireless backhaul domain. Perkins Coie LLP on behalf of T-Mobile has retained me. The contact attorney is Jared W. Crop. The trial is scheduled for the 4Q14.**

- Samsung v Apple, Northern District of California, San Jose Division: CV 11-02079**.** The case was in the 3G wireless domain (HSDPA). WilmerHale, representing Apple, retained me to work on both invalidity and non-infringement of two Samsung patents. The WilmerHale attorneys were Peter Kolovos and Richard Goldenberg. I prepared two expert reports and was deposed. Two weeks before the trial was scheduled to begin in August 2012 in the Northern District of California, Samsung withdrew the patents that they were asserting.
- Red River Fiber Optic Corporation v. Verizon, AT&T, and Qwest, Civil Action No. Case No.: 2:08-cv-00215-TJW-CE for the Eastern District of Texas. The case involves fiber optic networking. I was retained by Baker Botts (representing AT&T) and Winston Strawn (representing Verizon) to work on invalidity. The contact attorneys were Josh Parker (Baker Botts) and Pejman Sharifi (Winston Strawn). The case was settled in April 2012.
- Wi-LAN Inc. v. Acer, Inc., et al. Civil Action No. 2-07CV-473 for the Eastern District of Texas. McKool Smith representing Wi-LAN retained me. Contact attorney is Robert Cote (212) 402-9415. The case involved 3 patents covering OFDM and CDMA2000 wireless cellular and wireless LAN (802.11a/g/n) technologies, as well as DSL power management. I prepared both validity and infringement expert reports for these patents, I was deposed for two days, and I was actively involved in preparing reconsideration brief for Judge Ward (Marshall, TX) that resulted in a reversal of a critical claim construction element just two weeks before trial. The impact was substantial and resulted in the defendants (Intel, Broadcom, Atheros, and MARVELL) settling with Wi-LAN in January 2011.
- Rembrandt Data Technologies v AOL, LLC, Hewlett Packard UNITED STATES District Court for the Eastern District of Virginia- Alexandria Division, C.A. No. 1:08-cv-01009-GBL-IDD). I was retained by Jennifer Albert of Goodwin Proctor (202-346-4322) representing HP, Michael Jacobs of Crowell and Moring (202-624-2568) representing Canon, and Alex Pilmer of Kirkland and Ellis (213-680-8405) representing Direct TV. The case involved voice-band modems. I prepared two expert reports and was <u>deposed </u>and I expected to testify at the trial in July 2009. At the Markman hearing, the judge supported all of our claim constructions and he ruled one of the patents was invalid<u>.</u> Based upon these outcomes, the attorneys have told me that Rembrandt has "given up."
- Nokia v InterDigital: Certain 3G Mobile Handsets and Components Thereof, Investigation, United States International Trade Commission, Engaged by Finnegan Henderson representing InterDigital and the contact attorney is Chris Isaac (571.203.2740). The case was in the 3G wireless space and was closely related to the Samsung v InterDigital case below. I prepared three expert reports and was deposed. The trial was in May/June 2009 and I testified at trial.
- Samsung v InterDigital: Certain 3G Mobile Handsets and Components Thereof, Investigation No. 337-TA-613, United States International Trade Commission, Engaged by Finnegan Henderson representing InterDigital and the contact attorney is Houtan Esfahani [(202) 408-4106]. The case was in the 3G wireless domain. I wrote 3 expert reports, gave was deposited twice, and I testified at the trial in July 2008.
- Cable Networks v Rembrandt: Engaged by Mr. Leroy M. Toliver [(404) 815-6483] of Kilpatrick Stockton LLP, representing Cox Cable. The case involves cable modem and over the air digital television access protocols that use trellis coded modulation. I performed preliminary work as a technical consultant, prepared an initial expert report, and was deposed. Cox is part of a group of (almost) all the cable companies (Cox, Comcast, Time Warner, Charter,) that engaged me in this case. As a result of a briefing that I co-authored there was a summary judgment in favor of the cable companies.

- Broadcom vs. Brent Townshend (I was engaged by Broadcom and the attorney that I worked with is Scott Oliver, now with Morrison & Foerster (650) 813-5733 –same attorney as in the ESS vs. Brent Townshend case below). The case was in the wireline modem domain and involved V.90 voice-grade modem technology. I wrote an expert report and was preparing to testify when the case was settled.
- Vonage Holding Corporation v. SBC Internet Services, et al., 4:04-CV-548-Y [Consolidated with Nortel Networks, Inc. v. Digital Packet Licensing, 4:05-CV-224-Y], (Northern District of Texas, Fort Worth Division). I was on the SBC/AT&T side. Attorney was Michael L. Brody of Winston & Strawn, LLP 312/558-6385. The case was in the VoIP packet voice domain; I did some initial work providing some very strong prior art and the case was settled before trial.
- Nokia Corporation v. InterDigital Technology Corporation, Claim No. HC-04-C01952 in the High Court of Justice Chancery Division Patents Court ("UK1"). I was engaged by Milbank Tweed (London) representing InterDigital and contact attorney is Ben Thomson +44 20766345. I prepared an expert report. The case went to trial in London in November 2006 and I testified at trial. The case was in the wireless 2G GSM domain.
- ESS vs. Brent Townshend (I was engaged by ESS and the attorney that I worked with is Scott Oliver, now with Morrison & Foerster (650) 813-5733. I wrote an expert report and was preparing to testify when the case was settled. The case was in the wireline V.90 modem domain.
- Nokia Corporation v. InterDigital Communication Corporation, et al.; Arbitration No. 12 829/JNK in the International Chamber of Commerce, International Court of Arbitration ("2G Arbitration"). Fulbright & Jaworski engaged me and the contact attorney is Richard Zembek (713) 651-5283. I prepared an expert report. The case went to trial and I testified. The case was in the wireless 2G GSM domain.

Awards and Honors

- **Distinguished University Professor, USF** (2013)
- **Charter Fellow of the National Academy of Inventors (NAI)** (2012)
- **National Academy of Engineering**, for "contributions to communications systems and networking" (2005)
- **Thomas Alva Edison patent award** for innovation in wireless networking (2005)
- **AT&T Bell Labs Fellow**, for "contributions to data communications" (1987)
- **IEEE Fellow** for "contributions to data communications techniques" (1986)
- **IEEE Communications Society Steven O. Rice Award** for the best original paper published in the *IEEE Transactions on Communications*: "Analog Diversity Coding to Provide Transparent Self-Healing Communication Networks" [first application of forward error control to realize fault tolerant broadband/optical networks. Co-authors: E. Ayanoglu, I. Bar-David, and Chih-Lin I] (1995)
- **IEEE Communications Society Frederick Ellersick Award** for the best paper published in *IEEE Communications: "*Reducing the Effects of Transmission Impairments in Digital Fiber Optic Systems", *IEEE Communications*, June 1993 [design of gigabit fiber optic equalizer to compensate for polarization mode dispersion]. Co-authors: S. Kasturia and J. Winters (1994).
- *Bell System Technical Journal Award* for the best paper in communications science " The Tap-Leakage Algorithm: An Algorithm for the Stable Operation of a Digitally Implemented, Fractionally Spaced Adaptive Equalizer", *Bell System Technical Journal*, vol.61, no.8 p.1817-39, Oct. 1982 [invented and

analyzed a new class of adaptation algorithms for stabilizing the adjustment of the tap weights in fractionally spaced equalizers]. Co-authors: E. Ho and J. Mazo (1982).

- Honor Societies: Tau Beta Pi, Eta Kappa Nu, and Sigma Xi

Selected Keynote Speeches and Invited Lectures

- WAMICON 2012
- COMCAS 2011
- WTSI 2010
- MPLS 2006
- Mobicomm 2004
- WCNC 2003
- APOC [Asian Pacific Optical and Wireless Conference] 2002
- Globecomm 1998

Professional Service

- NAE Nominating committees for the Electronics and Computer Science sections [2006]
- Member, IEEE Communications Society Board of Governors [1988-1991]
- Member, IEEE Communications Society Awards Board [1991-1994]
- President, Communication Theory Group, IEEE Communications Society [1988-1990]
- Chair, Communication Theory Workshop [1992]
- Member, Advisory Board for Computer Science and Engineering [CISE], National Science Foundation [1995-1998]
- Member, Industrial Advisory Board, Department of Electrical Engineering and Computer Science, University of California, Berkeley [1995-1996].
- Advisory/Editorial Board Member
    - Editor, Communication Theory, the *IEEE Transactions on Communications* [1977-1986]
    - *Bell Labs Technical Journal* [founding member in 1996 -2000]
    - *Journal of Communications Networks* [1998-present]
    - *Mobile Networks and Applications* [1996-present]
- Editor of several special issues of communications and networking journals.

Books

Data Communications Principles, Gitlin, Hayes, and Weinstein, Plenum Press (1992)

Selected Scientific Papers

1. G. E. Arrobo and R. D. Gitlin, "Improving the Reliability of In Vivo Video Wireless Communications," National Academy of Inventors: Journal of Technology and Innovation, to appear in 2013.

2. C. A. Castro, S. Smith, A. Alqassis, T. P. Ketterl, Yu Sun, S. Ross, A. Rosemurgy, P. P. Savage, and R. D. Gitlin, "A Wireless Miniature Robot for Networked Expedited Laparoscopy," IEEE Transactions on Biomedical Engineering (TBME), April 2013, pp. 930-936, DOI: 10.1109/TBME.2012.2232926.

3. G. E. Arrobo and R. D. Gitlin, "Improving the Performance of OFDM-based Vehicular Systems through Diversity Coding," IEEE Journal of Communications and Networks, April 2013, pp. 132–141, DOI: 10.1109/JCN.2013.000026.

4. T. P. Ketterl, G. E. Arrobo, and R. D. Gitlin, "SAR and BER Evaluation Using a Simulation Test Bench for *In Vivo* Communication at 2.4 GHz," IEEE 14th Annual Wireless and Microwave Technology Conference (WAMICON), April 2013, Orlando, FL, pp. 1-3, DOI: 10.1109/WAMICON.2013.6572751.

5. A. Alqassis, C. A. Castro, S. Smith, T. P. Ketterl, Yu Sun, P. P. Savage, and R. D. Gitlin, "A Wireless Robotic Video Laparo- Endoscope for Minimal Invasive Surgery," IEEE Workshop On Robot Vision (WorV), January 2013, pp. 1-7, paper.

6. G. E. Arrobo and R. D. Gitlin, "Minimizing Energy Consumption for Cooperative Network and Diversity Coding Sensor Networks," 4th Latin-American Conference on Communications (LATINCOM), 2012, Cuenca, Ecuador, pp. 1–6, paper.

7. G. E. Arrobo, R. D. Gitlin, and Z. J. Haas, "Temporal Diversity Coding for Improving the Performance of Wireless Body Area Networks," 7th International Conference on Body Area Networks - BodyNets, 2012, Oslo, Norway, pp. 187-190, ISBN: 978-1-936968-60-2.

8. A. Alqassis, T. P, Ketterl, C. A. Castro, R. D. Gitlin, S. Ross, Yu.Sun, and A. Rosemurgy, "MARVEL *In Vivo* Wireless System," National Academy of Inventors: Journal of Technology and Innovation, 2012, vol. 14, no. 3, pp. 329-340, DOI:10.3727/194982412X13500042169090.

9. C. A. Castro, S. Smith, A. Alqassis, T. P. Ketterl, Yu Sun, S. Ross, A. Rosemurgy, P. P. Savage, and R. D. Gitlin, "MARVEL: A Wireless Miniature Anchored Robotic Videoscope for Expedited Laparoscopy," IEEE International Conference on Robotics and Automation (ICRA), 2012, St. Paul, MN, pp. 1-6, DOI: 10.1109/ICRA.2012.6225118.

10. Thomas P. Ketterl, Gabriel E. Arrobo, Alphan Sahin, Thomas J. Tillman, Huseyin Arslan, and Richard D. Gitlin, *"In Vivo* Wireless Communication Channels," WAMICON 2012, April 2012.

11. Cristian A. Castro, Sara Smith, Adham Alqassis, Thomas Ketterl, Yu Sun, Sharona Ross, Alexander Rosemurgy, Peter P. Savage, and Richard D. Gitlin "MARVEL: A Wireless Miniature Anchored Robotic Videoscope for Expedited Laparoscopy," 2012 IEEE International Conference on Robotics and Automation, May 14-18, 2012.

12. G. Arrobo and R. D. Gitlin, "New Approaches to Reliable Wireless Body Area Networks," in *IEEE International Conference on Microwaves, Communications, Antennas and Electronics Systems*, (COMCAS 2011), November 2011.

13. G. Arrobo and R. D. Gitlin, "Improving the Reliability of Wireless Body Area Networks," in *Annual International Conference of the IEEE Engineering in Medicine and Biology Society* (EMBC 2011), August 2011.

14. G. Arrobo and R. D. Gitlin, "Effect of the number of clusters on the performance of Cooperative Network Coding," *Wireless Telecommunications Symposium 2011* (WTSI 2011), April 2011.

15. G. Arrobo and, R. D. Gitlin, "Effect of the Connectivity on the Performance of Cooperative Network Coding," in *12th Annual IEEE Wireless and Microwave Technology Conference* (WAMICON 2011), April 2011.

16. G. Arrobo, R.D. Gitlin, and Z. Haas, "Effect of Link-Level Feedback and Retransmissions on the Performance of Cooperative Networking", WCNC 2011, Cancun, Mexico, April 2011.

17. G. Arrobo and R.D. Gitlin, "Effect of the Connectivity on the Performance of Cooperative Network Coding," WAMICON 2011, Clearwater, FL, April 2011

18. G. Arrobo and R.D. Gitlin, "Effect of the number of clusters on the performance of Cooperative Network Coding," WTS 2011, New York, NY, April 2011.

19. J. Medrano, J. I. Rey, R. J. Connolly, A. Anderson, M. Jaroszeski, and R. Gitlin, "Online bioimpedance feedback for *in vivo* electroporated tissues," *Journal of Physics*, Conference Series, Vol. 205, April 2010

20. Julio Medrano, R.J. Connolly, Jose Rey, Adam Anderson, Mark Jaroszeski and Richard Gitlin, "Bioimpedance as an Indicator of DNA Delivery by Electroporation" First American Medical Association and IEEE Engineering in Medicine and Biology Society Conference on Medical Technology, Washington DC, March 2010.

21. Coordinated load balancing, handoff/cell-site selection, and scheduling in multi-cell packet data systems, Aimin Sang, Xiaodong Wang, Mohammad Madihian, and Richard D. Gitlin, *Wireless Networks,* June 2008.

22. A flexible downlink scheduling scheme in cellular packet data systems, Sang, A.; Xiaodong Wang; Madihian, M.; Gitlin, R.D.; *IEEE Transactions on Wireless Communications*, Volume 5, Issue 3, March 2006 Page(s): 568 - 577

23. Incentive Scheduling for Cooperative Relay in WWAN/WLAN Two-Hop-Relay Networks, Hung-yu Wei and Richard D. Gitlin, *WCNC 2005,* March 2005.

24. Dynamic Channel Management in MIMO OFDM Cellular Systems, Ben Lu, Xiaodong Wang, Richard D. Gitlin and Mohammad Madihian, *Wireless Communications and Mobile Computing (*J. *Wiley Interscience)*, November, 2005.

25. Downlink Scheduling Schemes in Cellular Packet Data Systems of Multiple-Input Multiple-Output Antennas, A. Sang, M. Madihian, X. Wang, and R.D. Gitlin, Globecomm *2004*, December 2004.

26. A Load-aware Handoff and Cell-site Selection Scheme in Multi-cell Packet Data Systems, A. Sang, M. Madihian, X. Wang, and R.D. Gitlin*, Globecomm 2004*, December 2004.

27. Coordinated Load Balancing, Handoff/Cellsite Selection, and Scheduling in Multicell Packet Data Systems, A. Sang, M. Madihian, X. Wang, and R.D. Gitlin, *Mobicom 2004*, September 2004.

28. Two-hop Relay Architecture for Next-Generation WWAN/WLAN Integration, H-Y Wei, and Richard D. Gitlin, *Wireless Communications*, April 2004

29. WWAN/WLAN Two-Hop-Relay Architecture for Capacity Enhancement, H-Y Wei and Richard D. Gitlin, *WCNC2004*, March 2004

30. Secure Candidate Access Router Discovery, E. Shim, J. Redlich, R. Gitlin, *WCNC2003*, New Orleans, March 2003.

31. Low Latency Handoff for Wireless IP QOS with NeighborCasting, E. Shim, H. Wei, Y. Chang, R.Gitlin, *ICC 2002*, New York, USA, May 2002

32. IP Paging in Mobile Multihop Networks, H-Y Wei and R.D. Gitlin, *Mobicomm*, 2002

33. Next-Generation Networks*,* Dowden, D., Gitlin, R. D., Martin, R. L, *Bell Labs Technical Journal*, vol. 3, no. 4, October-December 1998

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37. The Expanding World of Wireless Technology, Richard D. Gitlin, George I. Zysman, *Bell Labs Technical Journal*, Volume 1, Issue 2, Date: Autumn (Fall) 1996.

38. Challenges for Nomadic Computing: Mobility Management and Wireless Communications, La Porta, T.F.; Sabnani, K.K.; Gitlin, R.D. *Mobile Networks and Applications (MONET)* vol.1, no.1 p.3-16 Aug. 1996

39. Broadband Network Restoration, Ayanoglu, E., Gitlin, R.D., *IEEE Communications* vol.34, no.7 p.110-19 July 1996

40. Performance of Multi-code CDMA Wireless Personal Communications Networks, Chih-Lin I; Pollini, G.P.; Ozarow, L.; Gitlin, R.D., *1995 IEEE 45th Vehicular Technology Conference*. P.907-11 vol.225-28 July 1995

41. Optimum Location Area Sizes and Reverse Virtual Call Setup in PCSNetworks, Chih-Lin I; Pollini, G.P.; Gitlin, R.D., *1995 IEEE 45th Vehicular Technology Conference*, p.140-4 vol.1 p.25-28 July 1995

42. Multi-Code CDMA Wireless Personal Communications Networks Chih-Lin I; Gitlin, R.D. *1995 IEEE International Conference on Communications* p.1060-4 vol.2, 18-22 June 1995

43. The Reverse Virtual Call Setup Algorithm for Mobility Management in PCS Networks Chih-Lin I; Pollini, G.P.; Gitlin, R.D., *1995 IEEE International Conference on Communications* p.745-9 vol.2 18-22 June 1995

44. An Asymmetric Protocol for Digital Cellular Communications Paul, S.;Ayanoglu, E.; La Porta, T.F.; Chen, K. -W.H.; Sabnani, K.E.; Gitlin, R.D., *INFOCOM'95*, 2-6 April 1995

45. AIRMAIL: A Link-Layer Protocol for Wireless Networks Ayanoglu, E.; Paul, S.; LaPorta, T.F.; Sabnani, K.K.; Gitlin, R.D. *Wireless Networks*, vol.1, no.1 p.47-60 1995

46. B-ISDN: A Technological Discontinuity, La Porta, T.F.; Veeraraghavan, M.; Ayanogiu, E.; Karol, M.; Gitlin, R.D.; *IEEE Communications*, Volume: 32, Issue: 10, p 84 – 97 Oct. 1994

47. Spectrally Efficient Universal Time Slots Using Time-Frequency-Code Slicing, Woodworth, C.B.; Karol, M.J.; Haas, Z.J.; Gitlin, R.D. *5th IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC`94)*

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49. Analog Diversity Coding to Provide Transparent Self-Healing Communication Networks, Ayanoglu, E.; Chih-Lin I; Gitlin, R.D.; Bar-David, I. *IEEE Transactions on Communications* vol.42, no.1 p.110-18 Jan. 1994

50. An Integrated Multimedia Terminal for Teleconferencing, Woodworth, C.; Golden, G.D.; Gitlin, R.D., *Proceedings of GLOBECOM '93*, 29 Nov.-2 Dec. 1993

51. Performance Improvement in Broadband Networks Using Forward Error Correction for Lost Packet Recovery, Ayanoglu, E.; Gitlin, R.D.; Oguz, N.C., *Journal of High Speed Networks,* vol.2, no.3 p.287-303, 1993

52. Diversity Coding for Transparent Self-Healing and Fault-Tolerant Communication Networks, Ayanoglu, E.; Chih-Lin I; Gitlin, R.D.; Mazo, J.E., *IEEE Transactions on Communications,* vol.41, no.11, Nov. 1993

53. A Microcell/Macrocell Cellular Architecture for Low- and High-Mobility Wireless Users, I, C.-L.; Greenstein, L.J.; Gitlin, R.D., *IEEE Journal on Selected Areas in Communications* vol.11, no.6 p.885-91 Aug. 1993

54. Gigabit Networking Research At AT&T Bell Laboratories, Gitlin, R.; *LEOS 1993 Summer Topical Meeting Digest*, 19-30 July 1993.

55. Reducing the Effects of Transmission Impairments in Digital Fiber Optic Systems, Winters, J.H.; Gitlin, R.D.; Kasturia, S., *IEEE Communications*, June 1993

56. Memory- and Channel-Sharing Techniques for Congestion Control in ATM Networks Eng, K.Y.; Karol, M.J.; Gitlin, R.D, *IEEE INFOCOM ' 93*. P.266-73 vol.1 28 March-1 April 1993

57. Adaptive Antennas For Digital Mobile Radio, Winters, J.H.; Salz, J.; Gitlin, R.D.; *Adaptive Antenna Systems Symposium, 1992. Proceedings of the IEEE Long Island Section* , November, 1992 Pages:81 - 86

58. The Capacity of Wireless Communication Systems Can Be Substantially Increased by the Use of Antenna Diversity, Winters, J.H., Salz, J.; Gitlin, R.D *1st International Conference on Universal Personal Communications, ICUPC '92* Proceedings p.02.01/1-5 29 Sept.-1 Oct. 1992

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60. Optical Distribution Channel: An Almost-All Optical LAN Based on the Field-Coding Technique Haas, Z.; Gitlin, R.D.; *Journal of High Speed Networks* vol.1, no.3 p.193-214 1992

61. Gigabits to the User through a High-Speed Optical Interconnect, Haas, Z; Gitlin, R.D.; *Proceedings of ACM/Sigcomm '91*.

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64. *LuckyNet*, Gitlin, R.D.; London, T.B.; Greenstein, L.J.; Ahuja, S.R. *GLOBECOM '91*. Conference Record p. 1055-64 vol.2 2-5 Dec. 1991

65. A Flexible Broadband Packet Switch for a Multimedia Integrated Network Woodworth, C.B.; Karol, M.J.; Gitlin, R.D., *International Conference on Communications,* Conference Record p.78-85 vol.1 23-26 June 1991

66. Ghost Cancellation of Analog TV Signals: With Applications to IDTV, EDTV, and HDTV, Winters, J.H.; Ayanoglu, E.; Bar-David, I.; Gitlin, R.D.; I, C. -L. *ICASSP 91*, p.2861-4 vol.4 14-17 April 1991

67. On The Packet Size in Integrated Networks, Haas, Z.; Gitlin, R.D., *INFOCOM '91.* P.732-40 vol.2 7-11 April 1991

68. High-Performance Optical Local and Metropolitan Area Networks: Enhancement of FDDI and IEEE 802.6 DQDB, Karol, M.J.; Gitlin, R.D. *IEEE Journal on Selected Areas in Communications* vol.8, no.8 p.1439-48 Oct. 1990

69. Protocols for Error/Loss Recovery in Broadband ISDN, Ayanoglu, E.; Gitlin, R.D.; Johri, P.K.; and Lai, W.S.; *Proceedings of the 7th ITC*, July 1990

70. Diversity Coding: Using Error Control for Self-Healing in Communication Networks, Ayanoglu, E.; Chih-Lin I; Gitlin, R.D.; Mazo, J.E., *IEEE INFOCOM '90*, June 1990

71. A Framework for a National Broadband (ATM/B-ISDN) Network Eng, K.Y.; Gitlin, R.D.; Karol, M.J., *IEEE International Conference on Communications ICC '90,* p.515-20 vol.2, 6-19 April 1990

72. Transparent Self-Healing Communication Networks Via Diversity Coding, Chih-Lin I; Ayanoglu, E.; Gitlin, R.D.; Mazo, J.E., *IEEE International Conference on Communications ICC '90,* p.509-14 vol.2 16-19 April 1990

73. Electrical Signal Processing Techniques in Long-Haul, Fiber-Optic Systems, Winters, J.H.; Gitlin, R.D., *IEEE International Conference on Communications ICC '90,* p.397-403 vol.2 p.16-19 April 1990

74. Adaptive Carrier Recovery Systems for Digital Data Communications Receivers, Cupo, R.L.; Gitlin, R.D., *IEEE Journal on Selected Areas in Communications,* vol.7, no.9 p.1328-39, Dec. 1989

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Patents: 47 issued United States Patents with 2 applied for and pending.